Title of presentation by

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From human leukocyte complex carbohydrates to adhesion proteins and peptide-based inhibitors of inflammation.

Synopsis

The types of cell surface complex carbohydrates expressed by various population of human leukocyte varies in a lineage and differentiation specific manner. Some of these antigens have been found to be important for leukocyte-endothelial and leukocyte-platelet adhesion processes. These selectin-mediated adhesion processes are important in regulating lymphocyte recirculation and inflammation. Development of molecules that can inhibit selectin/carbohydrate adhesion processes will be of therapeutic use. This talk will provide an historic review of the work that provided a structural basis for the rapid identification of the carbohydrate ligands recognized by selectins. An emphasis will be placed on demonstrating how slight structural differences between two complex carbohydrate antigens (i.e. sialyl-Lewis X and VIM2) can significantly affect recognition by selectins. Finally, results from *in vitro* and *in vivo* studies of peptide-based inhibitors of selectin-mediated inflammation will be presented.

Source: https://www.industrydocuments.ucsf.edu/docs/nfdb0000